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ABSTRACT

Results of a 1979-80 survey of institutional presidents are evaluated. The officers of 481 public colleges and 864 private colleges were mailed questionnaires, and 544 responses representing 266 public and 336 private colleges were received. Of the respondents, 477 were males and 66 were females, and the following titles were identified: presidents, chancellors, deans, vice-presidents, and provosts. In regard to academic preparation, social science fields were the major emphases at the bachelor's, master's, and terminal degree levels for those respondents who supplied this information. Seventeen different types of experiences in four categories (teaching, public service, professional practice, and administration) were identified as professional experience before becoming college and university presidents. Presidents of both public and private institutions perceived governing board relations, planning and administering the budget, and program development and improvements to be significantly more important to their overall functioning than their handling of student affairs. They also rated planning and administering the budget as being significantly more important than personnel tasks. Tasks that were rated as consuming the most time along with tasks perceived as important are analyzed separately for representatives from public and private colleges. Both groups also rated the stress potential of tasks and challenging current and future issues that confront higher education. Among the issues that were identified are: fiscal responsibility, tapping traditional and nontraditional funding sources, and responding to enrollment declines. Implications regarding training leaders in the field of higher education are addressed. (SW)

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PROBE* EXAMINES THE PRESIDENCY IN HIGHER EDUCATION

Jerry Duea
and Walter L. Bishop

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Introduction

Prior to initiating this study PROBE*, in conjunction with the Current Issues in Higher Education class at the University of Northern Iowa, conducted a survey of the ranking officers of postsecondary educational institutions in Iowa during the summer of 1979. Included in the survey sample were the heads of forty-two postsecondary educational institutions--the ranking officers of the state's twenty-seven four-year colleges and universities (public and private) and the superintendents of the state's fifteen merged area schools (state-supported, two-year postsecondary institutions). That limited study served as a pilot test of the survey instrument and data analysis techniques employed in the implementation of a nationwide survey of college and university presidents which was launched by PROBE during the winter of 1979-80. This national survey generated the findings and conclusions that are the substance of this report.

The survey was undertaken with financial assistance from both the College of Education and the Graduate College at the University of Northern Iowa. The heads of 1345 colleges and universities in the United States were invited to participate. Of these, 481 were public institutions and 864 were under private sponsorship. The institutions polled were identified on the basis of their participation in teacher education according to data released by the RITE Project at Indiana University in 1976.

The survey instrument employed was a one-page, self-mailing questionnaire. It was designed to accomplish four major objectives: (1) the collection of demographic data; (2) the identification and evaluation of experiences included in the incumbents' professional backgrounds; (3) the identification and evaluation

*PROBE is an acronym for Practical Research into Organizational Behavior and Effectiveness. This independent research organization is headquartered on the University of Northern Iowa campus. The authors co-direct the agency's operations; Dr. Duea is director of research and Dr. Bishop serves as director of the organization's education division.

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of administrative tasks and concerns in terms of time consumption, importance and stress potential; and (4) the identification of major issues confronting educational institutions--now and in the future.

Questionnaires were distributed in two mailings. The first was dispatched in late October with a return deadline of November 6, 1979. A second questionnaire was sent to non-respondents in late January with a response deadline of February 15, 1980.

Findings

Survey Response

A total of 544 questionnaires out of 1345 were returned and analyzed, an overall response rate of 40.4 percent. Respondents represented 206 public colleges and universities (response rate = 42.8 percent) and 336 private institutions (response rate = 38.9 percent); two respondents failed to identify whether the institutions they represented were under public or private sponsorship.

Respondent Characteristics

Table 1 shows a variety of characteristics associated with the respondents and the institutions they represented.

Position or title. As noted in the table, 88.1 percent of the respondents identified themselves as president of the institutions they represented, and 5.3 percent held the title of chancellor. Of the remaining respondents, 6.4 percent indicated that they held other titles and 0.2 percent neglected to identify their positions. The titles most frequently mentioned under "other" were: dean or academic dean (10); vice president (8); acting chancellor or president (4); and provost (3).

Academic preparation. Out of the 544 participants in the survey, 417 identified their baccalaureate majors, 336 reported their masters' degree majors, and 371 gave their terminal degree majors or emphases. These are shown in Table 2. Although the academic organizational schemes vary in different institutions, an effort has been made to group the related majors reported into conventional categories. For the most part, no effort was made to distinguish between those subject area majors earned in education and those which were not; by and large such entries are grouped together under the appropriate academic title.

It can be seen in Table 2 that social science fields were the predominant choice of emphases in the graduate and undergraduate preparation of the college

Table 1 Characteristics of Respondents and the Institutions They Represented (542 of 544 responses).

Characteristics	Public (n=206) No.	Pct.	Private (n=336) No.	Pct.	Total (n=544) No.	Pct.
A. Respondent Characteristics						
1. Position/Title						
President	166	80.6	313	93.2	480	88.2
Chancellor	24	11.7	4	1.2	29	5.3
Other	15	7.3	19	5.7	34	6.3
Unreported	1	0.5	0	----	1	0.2
2. Sex						
Male	200	97.1	275	81.8	477	87.7
Female	5	2.4	61	18.2	66	12.1
Unreported	1	0.5	0	----	1	0.2
B. Institutional Characteristics						
1. Sponsorship						
Public	206	100.0	---	-----	206	37.9
Private	---	-----	336	100.0	336	61.8
Unreported	---	-----	---	-----	2	0.4
2. Institutional type						
Liberal arts college	14	6.8	253	75.3	268	49.4
Multipurpose college	89	43.2	50	14.9	139	25.6
Land grant university	32	15.5	0	----	33	6.1
Other university	71	34.5	26	7.7	97	17.9
Unreported	---	----	7	2.1	7	1.3
3. Enrollment						
500 or less	1	0.5	42	12.5	43	7.9
501 to 1000	8	3.9	112	33.3	121	22.3
1001 to 5000	86	41.7	162	48.2	249	45.9
5001 to 10,000	61	29.6	15	4.5	76	14.0
Over 10,000	48	23.3	4	1.2	52	9.6
Unreported	2	1.0	1	0.3	3	0.6
4. Degrees offered						
Baccalaureate degrees (BA/BS)	203	98.5	330	98.2	533	98.3
Masters degrees (MA/MS)	177	85.9	134	39.9	311	57.4
Educational Specialist (Ed.S.)	72	35.0	18	5.4	90	16.6
Masters of Fine Arts (MFA)	46	22.3	23	6.8	69	12.7
Doctor of Education (Ed.D.)	39	18.9	16	4.8	55	10.1
Doctor of Philosophy (Ph.D.)	63	30.6	22	6.5	85	15.7
Other doctoral degrees	28	13.6	25	7.4	53	9.8

Table 2 Degree Majors Reported by College and University Presidents

Majors	Degrees					
	BA/BS		MA/MS		Terminal	
	No.	Pct.	No.	Pct.	No.	Pct.
Administration (unspecified)	0	---	31	9.2	54	14.6
Agriculture Fields:						
Agriculture	9	2.2	3	0.9	0	----
Agricultural Economics	0	---	0	---	1	0.3
Agronomy	1	0.2	0	---	2	0.5
Forestry	2	0.5	0	---	0	----
Agriculture Subtotal	12	2.9	3	0.9	3	0.8
Business Fields:						
Business (unspecified)	0	---	0	---	0	----
Business Administration	11	2.6	1	0.3	0	----
Business Education	0	---	0	---	3	0.8
Management and Finance	0	---	3	0.9	0	----
Business Subtotal	11	2.6	4	1.2	3	0.8
Education:						
Education (unspecified)	23	5.5	37	11.0	0	----
Educational Administration	0	---	10	3.0	0	----
Elementary Education	0	---	0	---	2	0.5
Guidance and Counseling	2	0.5	10	3.0	2	0.5
Higher Education	0	---	0	---	50	13.5
Physical Education	5	1.2	2	0.6	0	----
Special Education	0	---	1	0.3	0	----
Education Subtotal	30	7.2	60	17.9	54	14.5
Engineering/Technology:						
Engineering (unspecified)	11	2.6	6	1.8	9	2.4
Industrial Education	0	---	1	0.3	0	----
Industrial Relations	2	0.5	0	---	0	----
Engineering/Tech. Subtotal	13	3.1	7	2.1	9	2.4
English/Language Arts:						
Classics	3	0.7	2	0.6	2	0.5
Communications	0	---	1	0.3	1	0.3
English	43	10.3	17	5.1	5	1.3
English Literature	4	1.0	6	1.8	14	3.8
Linguistics	0	---	0	---	1	0.3
Literary Criticism	0	---	0	---	1	0.3
Rhetoric	0	---	0	---	2	0.5
Speech	6	1.4	6	1.8	3	0.8
Eng./Lang. Arts Subtotal	56	13.4	32	9.6	29	7.8

Majors	Degrees BA/BS No.	BA/BS Pct.	MA/MS No.	MA/MS Pct.	Terminal No.	Terminal Pct.
Fine Arts:						
Art	2	0.5	0	---	0	---
Art education	0	---	2	0.6	0	---
Music	10	2.4	6	1.8	3	0.8
Fine Arts Subtotal	12	2.9	8	2.4	3	0.8
Foreign Languages:						
Foreign Language (unspecified)	7	1.7	5	1.5	4	1.1
Greek	2	0.5	1	0.3	0	---
Latin	3	0.7	0	---	0	---
Foreign Language Subtotal	12	2.9	6	1.8	4	1.1
Health Fields:						
Hospital Administration	0	---	1	0.3	0	---
Medicine	0	---	0	---	4	1.1
Pharmacy	1	0.2	0	---	0	---
Veterinary Medicine	0	---	0	---	1	0.3
Health Fields Subtotal	1	0.2	1	0.3	5	1.4
Law	0	---	0	---	3	0.8
Liberal Arts	6	1.4	0	---	0	---
Library Science	1	0.2	0	---	0	---
Mathematics	18	4.3	10	3.0	6	1.6
Philosophy	30	7.2	14	4.2	19	5.1
Psychology	11	2.6	22	6.5	31	8.4
Religion/Theology	14	3.4	32	9.5	16	4.3
Natural Sciences:						
Biology	14	3.4	3	0.9	3	0.8
Botany	0	---	2	0.6	2	0.5
Chemistry	17	4.1	6	1.8	11	3.0
Ecology	0	---	0	---	1	0.3
Geology	1	0.2	0	---	0	---
Geophysics	0	---	0	---	1	0.3
Physics	7	1.7	3	0.9	2	0.5
Science (unspecified)	9	2.2	4	1.2	5	1.3
Zoology	4	1.0	3	0.9	2	0.5
Natural Science Subtotal	52	12.6	21	6.3	27	7.2
Social Sciences:						
Anthropology	0	---	0	---	1	0.3
Economics	23	5.5	11	3.3	19	5.1
Government	0	---	0	---	2	0.5

Majors	Degrees BA/BS No.	BA/BS Pct.	MA/MS No.	MA/MS Pct.	Terminal No.	Terminal Pct.
Social Sciences Continued						
History	65	15.6	49	14.6	48	12.9
Humanities	2	0.5	0	----	0	----
Mediterranean Studies	0	----	0	----	1	0.3
Political Science	30	7.2	16	4.8	20	5.4
Social Science (unspecified)	5	1.2	0	----	1	0.3
Social Studies	2	0.5	0	----	2	0.5
Social Welfare	0	----	0	----	2	0.5
Sociology	11	2.6	9	2.7	9	2.4
Social Science Subtotal	138	33.1	85	25.4	105	28.2
TOTAL RESPONSE	417		336		371	

and university presidents surveyed. They accounted for 33.1 percent of the undergraduate majors reported, 25.4 percent of the master's degree majors, and 28.2 percent of the terminal degree emphases (29.2 percent overall). Other fields in the top five overall were: education (12.8 percent); English/language arts (10.4 percent); natural sciences (8.9 percent); and unspecified administrations (7.6 percent).

At the baccalaureate level, the five major areas mentioned most frequently were: social science fields (33.1 percent); English/language arts (13.4 percent); natural sciences (12.6 percent); and education and philosophy (each with 7.2 percent). The top five areas of academic emphasis at the master's degree level were: social science fields (25.4 percent); education (17.9 percent); English/language arts (9.6 percent); religion/theology (9.5 percent); and psychology (6.5 percent).

It would seem reasonable to assume that terminal degree training would be the most important aspect of academic preparation for the college or university presidency. At this level, social science fields--identified by 28.2 percent of those who provided such information--held almost a two-to-one margin over the next most frequently mentioned area of emphasis. Following social science fields were: unspecified administration (14.6 percent); education (14.5 percent); psychology (8.4 percent); and English/language arts (7.8 percent).

Three hundred five survey respondents also identified the terminal degrees which they had earned. They were as follows:

1. Bachelor of Divinity (B.D.)--1
2. Bachelor of Laws (L.L.B.)--1
3. Doctor of Education (Ed.D.)--48
4. Doctor of Medicine (M.D.)--5
5. Doctor of Philosophy (Ph.D.)--248
6. Doctor of Theology (Th.D.)--1
7. Doctor of Veterinary Medicine (D.V.M.)--1

Professional Experience Evaluations

Regarding professional experiences, participants in the survey were asked to do two things: (1) to identify, from a list of seventeen areas of professional experiences, those they had had prior to assuming their current leadership positions; and (2) to evaluate on a five-point scale the importance of the contribution that each experience identified made in preparing them for these positions. Results for the total group plus those obtained from respondents representing public and private institutions are shown in Table 3 (see page 8).

Overall Experience Ratings

As indicated in the table, the single previous experience shared by most of the college and university presidents who participated in the survey was teaching in postsecondary institutions. Four hundred thirty-nine respondents (81.0 percent) indicated that they had had postsecondary teaching experience prior to assuming their current positions.

Among the most common experiences, postsecondary teaching was followed by deanships in higher education (300 -- 55.4 percent), vice presidencies in higher education (249 -- 45.9 percent), chairmanships of postsecondary academic departments (239 -- 44.1 percent), and teaching in secondary schools (203 -- 37.5 percent).

Ranking sixth in frequency was "academic training in educational administration that led to a degree and/or certification" (175 -- 32.2 percent). Academic administrative training was complemented by administrative internships in post-secondary education which was identified by 72 respondents (13.2 percent).

Least common in the professional experience backgrounds of the college and university presidents who participated in the survey were professional practice in health fields -- dentistry, medicine, and veterinary medicine -- which was identified by twenty-one respondents (3.9 percent) and legal practice which was identified by seventeen respondents (3.1 percent).

Table 3 Evaluation of Professional Experiences Reported by Top Administrators in the Nation's Colleges and Universities

Experiences	Public Inst. (n=206) Pct.	Public Inst. (n=206) Mean Rating*	Private Inst. (n=336) Pct.	Private Inst. (n=336) Mean Rating*	Combined Grps. (n=542) Pct.	Combined Grps. (n=542) Mean Rating*
Teaching in:						
Elementary schools	15.0	2.65	18.5	2.73	17.2	2.70
Secondary schools	34.0	3.23	39.6	3.32	37.5	3.29
Post-secondary institutions	84.5	4.63	78.9	4.63	81.0	4.63
Other**	7.3	4.13	12.8	4.33	10.7	4.28
Public Service:						
Appointive public office	25.2	3.87	14.3	3.71	18.5	3.79
Elective public office	9.7	3.20	4.2	3.29	6.3	3.24
Professional Practice:						
Managerial positions in business or industry	15.0	4.19	15.2	4.45	15.1	4.36
Health fields (dentistry medicine, vet. medicine)	6.3	3.39	2.4	3.00	3.9	3.24
Law	2.9	3.50	3.3	3.27	3.1	3.35
Theology	3.9	3.50	25.9	4.12	17.5	4.06
Administration:						
Academic training in educational administration	35.9	3.96	30.1	4.14	32.3	4.06
Elementary/secondary school administration	16.5	3.47	17.0	3.93	16.8	3.76
Administrative internship in post-secondary educ.	14.1	3.90	12.8	4.19	13.3	4.07
Chair of a post-secondary academic department	47.6	4.45	42.0	4.16	44.1	4.28
Deanship in higher education	65.0	4.71	49.4	4.80	55.4	4.76
Vice presidency in higher education	58.3	4.90	38.4	4.81	45.9	4.85
Other #	25.2	4.52	22.6	4.53	23.6	4.52

* Mean ratings were based on a five-point scale with five being high.

** Leading responses under other techniques were: military training, adult education and graduate teaching.

\# Leading responses under other administration were presidencies of other institutions, assistant to president, chancellor, military officerships, and registrar.

Table 4 gives a rank order listing of the seventeen experiences evaluated and their mean ratings on a five-point scale.

Table 4 A Rank Order Listing of Preparational Experience Ratings by College and University Presidents (n = 542)

Rank	Mean Rating*	Experiences
1	4.85	Vice presidencies in higher education
2	4.76	Deanships in higher education
3	4.63	Teaching in post-secondary institutions
4	4.52	Other administrative experiences
5	4.36	Managerial positions in business or industry
6	4.28+	Chairing post-secondary academic departments
7	4.28	Other teaching experiences
8	4.07	Administrative internships in higher education
9	4.06+	Theological experience
10	4.06	Academic training in educational administration
11	3.79	Appointive public office
12	3.76	Elementary/secondary school administration
13	3.35	Legal practice
14	3.29	Teaching in secondary schools
15	3.24+	Health practice (dentistry, medicine, veterinary medicine)
16	3.24	Elective public office
17	2.70	Teaching in elementary schools

* Ratings were based on a five-point scale with five being high.

Response Differences Between Respondents From Public and Private Institutions

Proportional differences between responses by representatives of public and private institutions were examined statistically by Fisher's Z ratio. Due to the multiplicity of comparisons, the alpha criterion was set at the .01 level in order to reduce the effects of cumulative Type I error.

As one may have expected, the proportion of respondents representing private institutions who indicated that they had had theological experience (25.9 percent) exceeded the proportion from public institutions who had had such experience (3.9 percent) to a statistically significant degree ($p < .01$). Favoring public institutions statistically were the proportions of respondents who had held appointive public offices -- 25.2 vs. 14.3 percent, deanships -- 65.0 vs. 49.4 percent, and vice presidencies in higher education -- 58.3 vs. 38.4 percent ($p < .01$ in all instances).

Remarkable consistency was found to exist between the mean experience ratings (on a five-point scale) of the subgroups based on institutional sponsorship. The rank difference correlation (Spearman rho) between the mean ratings of the public and private subgroups was .944. Furthermore, orthogonal comparisons via t ratios failed to reveal any differences between mean ratings that were significant at the .01 level.

Other Subgroup Comparisons

Table 5 (see page 11) shows comparisons of experience ratings between two additional subgroups, males vs. females and college representatives vs. those from universities.

Again, Fisher's $\bar{z}$ formula was applied to proportional differences between subgroup responses. In the sex-based subgroups, the proportions of males who reported having experience in elective public office (7.1 percent vs. 0.0 percent), theology (19.3 vs. 4.5 percent), and vice presidencies in higher education (49.3 vs. 22.7 percent) exceeded the proportions of female respondents who reported having had these experiences. Female respondents held the advantage in teaching in elementary schools (42.4 vs. 13.6 percent) and teaching in secondary schools (65.2 percent vs. 33.5 percent). All differences reported were significant at the .01 level.

Like analyses of responses by the college and university subgroups revealed advantages favoring the college respondents in teaching in secondary schools (41.3 vs. 26.2 percent) and theological experience (21.1 vs. 5.4 percent); the advantage went to university respondents in chairing post-secondary academic departments (56.2 vs. 43.2 percent). These differences also were significant at the .01 level.

Although the rank difference correlation coefficients observed were somewhat lower between the male/female subgroups (rho = .849) and the college/university subgroups (rho = .804), considerable consistency was found in the mean experience ratings of these subgroups as determined by orthogonal t ratio comparisons. In no instance were significant differences found between the ratings of male and female respondents. While it appeared that the difference between the male and female ratings regarding the importance of holding public office as a preparational experience may have proved significant, no such comparison could be drawn because none of the female respondents reported having held elective public offices.

Table 5 Professional Experience Ratings by Subgroups Based on Sex and Institutional Status

Experiences	Males (n=477) Pct.	Males (n=477) Mean Rating*	Females (n=66) Pct.	Females (n=66) Mean Rating*	Colleges (n=407) Pct.	Colleges (n=407) Mean Rating*	Universities (n=130) Pct.	Universities (n=130) Mean Rating*
Teaching in:								
Elementary schools	13.6	2.91	42.4	2.21	19.2	2.74	10.8	2.57
Secondary schools	33.5	3.31	65.2	3.19	41.3	3.27	26.2	3.44
Post-secondary institutions	79.7	4.63	87.9	4.60	80.3	4.61	83.1	4.68
Other**	10.7	4.39	10.6	3.43	11.5	4.21	6.9	4.56
Public Service:								
Appointive public office	19.1	3.80	13.6	3.67	16.7	3.78	23.8	3.90
Elective public office	7.1	3.24	0.0	----	5.9	3.54	6.9	2.67
Professional Practice:								
Managerial positions in business or industry	16.4	4.37	7.6	4.20	15.5	4.35	13.1	4.53
Health fields (dentistry medicine, vet. medicine)	4.2	3.25	1.5	3.00	2.9	3.17	5.4	4.00
Law	2.9	3.29	4.5	3.67	2.9	3.42	3.1	3.75
Theology	19.3	4.07	4.5	4.00	21.1	4.07	5.4	4.29
Administration:								
Academic training in educational administration	33.5	4.07	22.7	4.00	34.4	4.09	26.2	3.97
Elementary/secondary school administration	16.8	3.74	16.7	3.91	18.2	3.84	12.3	3.56
Administrative internship in post-secondary educ.	12.6	4.02	18.2	4.33	14.0	4.26	10.8	3.43
Chair of a post-secondary academic department	42.3	4.31	54.5	4.11	41.5	4.18	52.3	4.52
Deanship in higher education	56.4	4.75	47.0	4.87	52.8	4.78	64.6	4.71
Vice presidency in higher education	49.3	4.85	22.7	4.87	43.2	4.85	56.2	4.88
Other#	24.1	4.51	19.7	4.62	23.3	4.51	25.4	4.58

* Mean ratings were based on a five-point scale with five being high.

** Leading responses under other techniques were: military training, adult education and graduate teaching

\# Leading responses under other administration were presidencies of other institutions, assistant to president, chancellor, military officerships, and registrar.

Interestingly, however, two rather substantial, but nonsignificant, differences (due largely to the small number of female respondents) were observable between the mean experience ratings of the male and female subgroups, and between the within-group rankings associated with them. Whereas the mean rating for administrative internships in higher education by males was 4.02, the mean rating by females was 4.33. As a result, this experience ranked fifth among the ratings by the female subgroup and tenth in the male ratings. Conversely, the mean rating for other teaching experiences (in addition to elementary, secondary, and post-secondary teaching) by males was 4.39 as compared to a mean rating of 3.43 for females. The corresponding within-group ranks for the latter experience were five and thirteen respectively.

The only significant difference found between the mean ratings of the college and university subgroups was found in the chairing of post-secondary academic departments with the advantage favoring university respondents (4.52 vs. 4.18).

Similarly, only single significant differences were found in comparative analysis of the subgroups based on institutional status (liberal arts colleges, multipurpose colleges, land grant universities, universities) and enrollment. The lone significant difference among institutional status subgroups was found in the value placed on administrative internships in higher education when respondents from liberal arts colleges rated this experience higher than land grant university presidents (4.46 vs. 3.00). Among enrollment subgroups (500 or less, 501-1000, 1001-5000, 5001-10,000, and over 10,000), the 500-or-less subgroup rated teaching in elementary schools higher than the 1001-5000 subgroup did (3.89 vs. 2.46). As before, the differences reported were all significant at the .01 level.

Comparative Importance of Preparational Experiences

Analysis of variance (as shown in Table 6 on page 13) revealed highly significant differences existed in the overall importance ratings for the experiences evaluated. In order to examine the relative importance of the various background experiences evaluated, comparisons of the ratings for the total response group were made with Duncan's new multiple range test. The method developed by Kramer (1957) for utilizing the Duncan test in situations involving unequal numbers of replications was employed. As specified in tables developed by Harter (1957), alpha was set at .01 in order to hold cumulative Type I error below the .05 level. The findings are shown in Table 7 (see page 14).

Table 6 A Comparison of the Evaluations of Various Preparational Experiences in the Backgrounds of College and University Presidents

Source of Variation	df	SS	MS	F
Between experiences	16	779.3333	48.7081	52.05**
Within experiences	2379	2226.3600	.9358	
TOTAL	2395	1408.5833		

** $p < .01$

As can be seen in Table 7, the mean rating for vice presidencies in higher education exceeded all others except deanships in higher education to a highly significant degree statistically. In turn, deanships in higher education were rated as being significantly more important than all but the next two ranking experiences -- post-secondary teaching and other administrative experiences.

At the other end of the continuum, teaching in elementary schools was rated as being a less valuable preparatory experience for college and university presidencies than all other experiences except elective public offices and legal practice. (The latter two were handicapped in the comparison by the low number of respondents who had had these background experiences -- n=21 and n=17 respectively. Had these numbers been as high as thirty and twenty-four respectively, the existing mean differences would have been sufficient to achieve significance.)

Of particular interest to the researchers were the relative positions of the ratings for academic administrative training and administrative internships in higher education as they represented the only formal opportunities available for gaining administrative training and experience. Albeit a slight one (one one-hundredth of a point), the mean rating for administrative internships did hold an observable advantage over the rating for academic administrative training in the overall experience ratings of college and university presidents who particiated in the survey (4.07 vs. 4.06). Needless to say, it was not sufficient to achieve significance -- nor was it great enough to effect any differences in individual comparisons of these means with other experience ratings.

Table 7 Comparison of Mean Experience Ratings via Duncan's New Multiple Range Test

Experiences	Means	Differences between means																
		1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17
1. Elementary teaching	2.70	—	.54	.54**	.59**	.63	1.06**	1.09**	1.36**	1.36**	1.37**	1.58**	1.58**	1.66**	1.82**	1.93**	2.06**	2.15**
2. Elective public office	3.24		—	0.00	.05	.11	.52	.55	.82**	.82**	.83**	1.04**	1.04**	1.12**	1.28**	1.39**	1.52**	1.61**
3. Health practice	3.24			—	.05	.11	.52	.55	.82**	.82**	.83**	1.04**	1.04**	1.12**	1.28**	1.39**	1.52**	1.61**
4. Secondary teaching	3.29				—	.06	.47	.50**	.77**	.77**	.78**	.99**	.99**	1.07**	1.23**	1.34**	1.47**	1.56**
5. Legal practice	3.35					—	.41	.44	.71	.71	.72	.93**	.93**	1.01**	1.17**	1.28**	1.41**	1.50**
6. Elementary/secondary administration	3.76						—	.03	.30	.30	.31	.52**	.52**	.60**	.76**	.87**	1.00**	1.09**
7. Appointive public office	3.79							—	.27	.27	.28	.49**	.49**	.57**	.73**	.84**	.97**	1.06**
8. Academic administrative training	4.06								—	0.00	.01	.22	.22	.30	.46**	.57**	.70**	.79**
9. Theological experience	4.06									—	.01	.22	.22	.30	.46**	.57**	.70**	.79**
10. Administrative internships in higher education	4.07										—	.21	.21	.29	.43**	.56**	.69**	.78**
11. Other teaching experience	4.28											—	0.00	.08	.24	.35	.48**	.57**
12. Chairing academic departments	4.28												—	.08	.24	.35**	.48**	.57**
13. Management in business/industry	4.36													—	.16	.27	.40**	.49**
14. Other administrative experience	4.52														—	.11	.24	.33**
15. Postsecondary teaching	4.63															—	.13	.22**
16. Deanships in higher education	4.76																—	.09
17. Vice presidencies in higher education	4.85																	—

** $p < .01$

Consequently, both formal aspects of administrative training were found to be exceeded in importance by four other types of preparational experiences to a statistically significant degree: (1) vice presidencies in higher education; (2) deanships in higher education; (3) teaching in post-secondary institutions; and (4) other administrative experiences (exclusive of elementary/secondary administration).

On the other hand, the mean ratings for administrative internships in post-secondary education and academic training in educational administration were found to exceed the mean ratings for four other groups of preparational experiences to a statistically significant degree (the numbers in parentheses denote their overall ranks): (14) teaching in secondary schools; (15) health practices (dentistry, medicine, veterinary medicine); (16) elective public offices; and (17) teaching in elementary schools.

Like comparisons among other subgroups (representatives of public and private institutions, colleges, universities, males, females) revealed only minor departures from total group findings, except in the female subgroup where the low sample number (n=66) deterred the elicitation of significant findings. In that subgroup, academic training in educational administration exceeded only elementary school teaching in importance; and administrative internships in higher education were rated significantly higher than both elementary and secondary teaching ($p < .01$ in all instances). No experiences were rated significantly higher than academic training and administrative internships in this subgroup.

Evaluation of Administrative Tasks

Participants in the PROBE Survey of Institutional Presidents were asked to examine six common areas of administrative responsibility (plus "other") from three different perspectives: (1) from the standpoint of the amount of work time devoted to each task; (2) in terms of each task's importance to overall job performance; and (3) from the perspective of stress potential -- the degree to which each responsibility taxes one's physical and emotional reserves. Time consumption was identified by placing the various tasks in rank order according to the amount of time required by each task; the other two perspectives -- importance and stress potential -- were rated on five-point scales with one being indicative of low importance or stress potential and five being the highest mark that could be awarded. Table 8 (see page 16) summarizes the findings associated with these task evaluations.

Table 8 College and University Presidents' Ratings of Administrative Tasks According to Institutional Sponsorship

Tasks	Time Consumed		Task Importance		Stress Potential	
	Number of Responses	Mean Rank*	Number of Responses	Mean Rating**	Number of Responses	Mean Rating**
Public Institutions:						
Alumni affairs and fund raising	183	4.95	175	3.41	158	2.54
Planning and administering the budget	186	2.47	178	4.44	163	3.80
Personnel tasks (recruitment, negotiations, etc.)	184	3.18	176	4.06	160	3.61
Governing board relations (regents, trustees, legislative groups, etc.)	185	3.08	177	4.28	161	3.71
Program development and improvements	186	2.84	180	4.28	163	3.07
Student affairs	181	4.66	176	3.69	159	3.01
Other#	35	3.69	34	3.97	35	3.40
Private Institutions:						
Alumni affairs and fund raising	286	2.57	289	4.28	271	3.52
Planning and administering the budget	286	3.03	276	4.19	266	3.66
Personnel tasks (recruitment, negotiations, etc.)	280	3.66	273	3.69	256	3.42
Governing board relations (regents, trustees, legislative groups, etc.)	282	3.39	284	4.26	261	3.24
Program development and improvements	289	3.31	290	3.95	270	2.85
Student affairs	273	5.04	269	3.49	253	2.80
Other#	51	3.49	57	4.35	58	3.48
Combined Groups:						
Alumni affairs and fund raising	469	3.50	464	3.95	429	3.16
Planning and administering the budget	472	2.87	464	4.28	429	3.71
Personnel tasks (recruitment, negotiations, etc.)	464	3.47	449	3.84	416	3.49
Governing board relations (regents, trustees, legislative groups, etc.)	467	3.27	461	4.27	422	3.42
Program development and improvements	475	3.13	470	4.08	433	2.93
Student affairs	454	4.89	445	3.57	412	2.88
Other#	86	3.57	91	4.21	93	3.45

* Based on ranks 1-7.

** Based on a five-point scale with five being high.

\# Most frequently identified were public relations and civic affairs, general/routine administration, administrator and faculty relations, and long-range planning.

A major concern of the researchers was the question of whether or not respondents would be able to make such ratings with a sufficient degree of independence to warrant the drawing of conclusions. Or, after making the first rating (time consumption), would the next two ratings simply represent reflexive responses?

Of particular concern were the ratings for task importance and stress potential. In order to investigate the degree of independence (or for that matter, dependence) between these two groups of ratings, product moment correlation coefficients (Pearson r) were computed between individuals' importance and stress-potential ratings for the various tasks.

The coefficients obtained ranged from a low of .1977 between the importance and stress potential ratings for "other" to a high of .5313 for "governing board relations" (median = .3488). In turn, coefficients of determination (r^2) ranged from .0391 to .2823 (median r^2 = .1217). As a result, in no instance was more than twenty-nine percent of the variance in stress potential ratings accounted for by the variance associated with task importance ratings.

On the basis of these figures, it was concluded that a satisfactory level of independence was achieved between the task importance and stress potential ratings to warrant the making of other meaningful comparisons.

Overall Task Ratings

Due to considerable disparities observed between the ratings for public and private institutions -- especially regarding governing board relations and alumni affairs and fund raising -- the most meaningful comparisons can be drawn between the ratings of these two subgroups. Consequently, the bulk of the statistical testing in this section has been confined to the examination of these comparisons. However, observed findings are presented for the total response group. Overall time consumption rankings appear in Table 9 (see page 18), task importance ratings appear in Table 10 (see page 18), and stress potential ratings appear in Table 11 (see page 19).

It is interesting to note that the majority of tasks are quite closely grouped according to time consumption with the exception of the time devoted to student affairs. Whereas the mean ranks for all other tasks fall within a range of .76 of a rank, the mean rank for student affairs falls 1.22 points below the next highest task rating.

Table 9 Ordinal Rankings of Administrative Tasks According to Time Consumption as Reported by College and University Presidents

Absolute Rank	Mean Rank*	Administrative Task
1	2.81	Planning and administering the budget
2	3.13	Program development and improvements
3	3.27	Governing board relations (regents, trustees, legislative groups, etc.)
4	3.47	Personnel tasks (recruitment, negotiations, etc.
5	3.50	Alumni affairs and fund raising
6	3.57	Other
7	4.89	Student affairs

* Based on the numbers one through seven.

The differences between the ranks associated with time consumption and task importance are worthy of note. Only three of the tasks identified retain the same ranks on both scales: (1) planning and administering the budget, (5) alumni affairs and fund raising, and (7) student affairs. Although the differences between the mean task importance ratings appear to be somewhat more uniform than those for time consumption, the greatest disparity again appears between the ratings for student affairs and program development and improvements (the task rated next highest).

Table 10 Ratings of Administrative Tasks According to Their Importance to Overall Job Performance as Perceived by College and University Presidents

Absolute Rank	Mean Rank*	Administrative Tasks
1	4.28	Planning and administering the budget
2	4.27	Governing board relations (regents, trustees, legislative groups, etc.)
3	4.21	Other
4	4.08	Program development and improvements
5	3.95	Alumni affairs and fund raising
6	3.84	Personnel tasks (recruitments, negotiations, etc.)
7	3.57	Student affairs

* Based on a five-point scale with one being low and five high.

Only three tasks retained the same ranks in the three ratings by the total response group (as shown in Tables 8, 9, and 10). They were: (1) planning and administrating the budget; (5) alumni affairs and fund raising; and (7) student affairs.

Table 11 Stress Potential Associated With Selected Administrative Tasks as Reported by College and University Presidents

Absolute Rank	Mean Rank*	Administrative Tasks
1	3.71	Planning and administering the budget
2	3.49	Personnel tasks (recruitment, negotiations, etc.)
3	3.45	Other
4	3.42	Governing board relations (regents, trustees, legislative groups, etc.)
5	3.16	Alumni affairs and fund raising
6	2.93	Program development and improvements
7	2.88	Student affairs

* Based on a five-point scale with one being low and five high.

Intergroup Comparisons

Returning to Table 8 on page 16, considerable difference can be observed in the mean time consumption ranks obtained with public institutional representatives and those from private institutions (rank difference correlation = .214). The disparities in the rankings of the two groups are due largely to differences in the time apparently allocated to alumni affairs and fund raising. Whereas this task ranked first in time consumption among private institutional representatives, it was ranked seventh by respondents from public colleges and universities.

Task importance ratings also reflect the priority differences between the two groups of institutional representatives (see Table 12, page 20). In making t ratio comparisons of the mean task importance ratings by representatives of public and private institutions, it was found that alumni affairs and fund raising was rated significantly higher by private institutional representatives than by the administrators of public institutions (4,28 vs. 3.41, $p < .001$). On the other hand, administrators from public colleges and universities rated three tasks significantly higher (at the .01 level) than their counterparts in private institutions: (1) planning and administering the budget (4.44 vs. 4.19, $p < .010$); (2) personnel tasks (4.06 vs. 3.69, $p < .001$); and (3) program development and improvements (4.28 vs. 3.95, $p < .001$).

Comparisons of the stress potential ratings by respondents from public and private institutions are shown in Table 13 (see page 20).

Table 12 Comparisons of Task Importance Ratings by Presidents of Public and Private Institutions

Task	Mean Importance Ratings 1. Public	2. Private	$\bar{X}_1-\bar{X}_2$	t	Error Probability
Alumni affairs and fund raising	3.41	4.28	-.87	-8.20**	$<.001$
Planning and administering the budget	4.44	4.19	.25	2.79**	$<.010$
Personnel tasks (recruitment, negotiations, etc.)	4.06	3.69	.37	3.80**	$<.001$
Governing board relations (regents, trustees, legislative groups, etc.)	4.28	4.26	.02	0.14	$>.500$
Program developments and improvements	4.28	3.95	.33	3.60**	$<.001$
Student affairs	3.69	3.49	.20	2.00	$<.050$
Other	3.97	4.35	-.38	-1.71	$>.050$
Overall Importance Ratings	4.03	3.99	.04	.95	$>.300$

** $p < .01$

Table 13 Comparisons of Stress Potential Ratings by Presidents of Public and Private Institutions

Task	Mean Importance Ratings 1. Public	2. Private	$\bar{X}_1-\bar{X}_2$	t	Error Probability
Alumni affairs and fund raising	2.54	3.52	-.98	-8.12**	$<.001$
Planning and administering the budget	3.80	3.66	.14	1.29	$>.100$
Personnel tasks (recruitment, negotiations, etc.)	3.61	3.42	.19	1.61	$>.100$
Governing board relations (regents, trustees, legislative groups, etc.)	3.71	3.24	.47	3.86**	$<.001$
Program development and improvements	3.07	2.85	.22	2.11	$<.050$
Student affairs	3.01	2.80	.21	2.01	$<.050$
Other	3.40	3.48	-.08	-0.29	$>.500$
Overall Importance Ratings	3.30	3.26	.04	0.84	$>.300$

** $p < .01$

As indicated in Table 13, significant differences were found between the mean stress potential ratings of the two groups in only two instances: (1) representatives of private institutions associated greater stress with alumni affairs and fund raising than those who represented public colleges and universities (3.52 vs. 2.54); and (2) the presidents of public institutions rated governing board relations more stressful than respondents who represented private institutions. The differences were highly significant in both instances ($p < .001$).

Comparisons between the task importance and stress potential ratings by college and university ratings revealed two significant differences; university representatives attached more importance to program development and improvements and they associated more stress with governing board relations. However, these differences may largely be attributed to the fact that the majority of the university respondents represented public institutions.

Comparisons also were drawn between the ratings of male and female respondents for time consumption, task importance, and stress potential. They appear in Table 14 (see page 22). Few substantial differences were noted. In no instance were significant differences identified between the task importance ratings of the two groups. The only significant difference in the stress potential ratings was that males associated significantly more stress with student affairs than females did.

Intragroup Comparisons of Task Importance Ratings in Public and Private Institutions

Analysis of variance, as shown in Table 15 (see page 23), revealed the existence of significant differences in the importance ratings for selected tasks by public institutional respondents. In order to examine the relative importance associated with different administrative tasks, Duncan's new multiple range test was utilized to compare mean ratings for the selected tasks. Kramer's (1957) method for accommodating unequal replications was employed. Alpha was set at .01 to hold cumulative Type I error for the comparison of seven means below .05 according to tables developed by Harter (1957). The results appear in Table 16 (see page 23).

As shown in the table, alumni affairs and fund raising was exceeded in importance to a significant degree by each of the other six administrative

Table 14 Sex Variables in College and University Presidents' Ratings of Administrative Tasks

Tasks	Time Consumed		Task Importance		Stress Potential	
	Number of Responses	Mean Rank*	Number of Responses	Mean Rating**	Number of Responses	Mean Rating**
Males:						
Alumni affairs and fund raising	413	3.54	410	3.92	376	3.14
Planning and administering the budget	414	2.78	407	4.28	375	3.71
Personnel tasks (recruitment, negotiations, etc.)	409	3.47	395	3.83	365	3.49
Governing board relations (regents, trustees, legislative groups, etc.)	411	3.27	406	4.24	371	3.43
Program development and improvements	417	3.13	413	4.09	378	2.95
Student affairs	400	4.86	392	3.59	362	2.93
Other#	71	3.52	75	4.19	75	3.48
Females:						
Alumni affairs and fund raising	56	3.18	55	4.24	54	3.35
Planning and administering the budget	58	2.98	58	4.33	55	3.75
Personnel tasks (recruitment, negotiations, etc.)	55	3.49	55	3.93	52	3.52
Governing board relations (regents, trustees, legislative groups, etc.)	56	3.30	56	4.50	52	3.39
Program development and improvements	58	3.14	58	4.02	56	2.82
Student affairs	54	5.13	54	3.43	51	2.51
Other#	15	3.80	16	4.31	18	3.33

* Based on the ranks 1-7.

** Based on a five-point scale with five being high.

Most frequently identified were public relations and civic affairs, general/routine administration, administrator and faculty relations, and long-range planning.

Table 15 A Comparison of Selected Task Importance Ratings by Presidents of Public Colleges and Universities (ANOVA)

Source of Variation	df	SS	MS	F
Between Tasks	6	140.1307	23.3551	22.78**
Within Tasks	1089	1116.3640	1.0251	
TOTAL	1095	1256.4947		

** $p < .01$

tasks according to task ratings by presidents of public colleges and universities. Similarly, student affairs was exceeded in importance by all administrative tasks except other administrative tasks. Planning and administering the budget was rated significantly more important than personnel tasks in addition to the advantage it held over alumni affairs and fund raising and other administrative tasks.

Table 16 Comparisons of Task Importance Ratings by Public College and University Presidents as Determined by Duncan's New Multiple Range Test

Administrative Tasks	Mean Ratings	Differences Between Means						
		1	2	3	4	5	6	7
1. Alumni affairs and fund raising	3.41	---	.28**	.56**	.65**	.87**	.87**	1.03**
2. Student affairs	3.69		---	.28	.37**	.59**	.59**	.75**
3. Other	3.97			---	.09	.31	.31	.47
4. Personnel tasks	4.06				---	.22	.22	.38**
5. Governing board relations	4.28					---	.00	.16
6. Program development and improvements	4.28						---	.16
7. Planning and administering the budget	4.44							---

** $p < .01$

Task importance ratings by presidents of private colleges and universities were analyzed in the same manner. The results appear in Tables 17 and 18 (see page 24).

Among respondents from private institutions (as shown in Table 18), alumni affairs and fund raising, governing board relations, and planning and administering the budget were rated significantly more important than the three lowest rated tasks: program development and improvements, personnel tasks, and student affairs. Program development and improvements, and other

Table 17 A Comparison of Selected Task Importance Ratings by Presidents of Private Colleges and Universities

Source of Variation	df	SS	MS	F
Between Tasks	6	155.7197	25.9533	25.51**
Within Tasks	1731	1761.3290	1.0175	
TOTAL	1737	1917.0487		

** $p < .01$

administrative tasks -- identified most frequently as public relations and civic affairs, general/routine administration, administrator and faculty relations, and long-range planning -- also were rated significantly more important than personnel tasks and student affairs. All differences noted were significant at the .01 level. (Although other administrative tasks attained the highest mean importance rating, the low number of responses in this category precluded significant findings in comparisons with other, lower-ranking tasks.) Both the public and private subgroups indicated that governing board relations, planning and administering the budget, and program development and improvements were significantly more important to their overall functioning than the handling of student affairs. They also perceived planning and administering the budget to be significantly more important to their overall functioning than personnel tasks.

The major disagreement between subgroup ratings was the importance attached to alumni affairs and fund raising. It ranked second in importance among the responses of private institutional representatives and seventh (and last) in the public subgroup.

Table 18 Comparisons of Task Importance Ratings by Presidents of Private Colleges and Universities as Determined With Duncan's New Multiple Range Test

Administrative Tasks	Mean Ratings	Differences Between Means						
		1	2	3	4	5	6	7
1. Student affairs	3.49	---	.20	.46**	.70**	.77**	.79**	.86**
2. Personnel tasks	3.69		---	.26**	.50**	.57**	.59**	.66**
3. Program development and improvements	3.95			---	.24**	.31**	.33**	.40
4. Planning and administering the budget	4.19				---	.07	.09	.16
5. Governing board relations	4.26					---	.02	.09
6. Alumni affairs and fund raising	4.28						---	.07
7. Other	4.35							---

** $p < .01$

Intragroup Comparisons of Stress Potential Ratings in Public and Private Institutions

As shown in Table 19, analysis of variance revealed significant differences in the stress potential associated with selected administrative tasks by presidents in public colleges and universities. The results of stress potential rating comparisons drawn with Duncan's new multiple range test are shown in Table 20 . Alpha was set at .01 to hold cumulative Type I error below .05.

Table 19 A Comparison of Stress Potential Ratings for Selected Tasks by Presidents of Public Colleges and Universities (ANOVA)

Source of Variation	df	SS	MS	F
Between Tasks	6	196.7955	32.7993	26.22**
Within Tasks	992	1240.9390	1.2509	
TOTAL	998	1437.7345		

** $p < .01$

Table 20 Comparison of Stress Potential Ratings by Presidents of Public Colleges and Universities With Duncan's New Multiple Range Test

			Differences Between Means						
	Administrative Tasks	Mean Ratings	1	2	3	4	5	6	7
1.	Alumni affairs and fund raising	2.54	---	.47**	.53**	.86**	1.07**	1.17**	1.26**
2.	Student affairs	3.01		---	.06	.39	.60**	.70**	.79**
3.	Program development and improvements	3.07			---	.33	.54**	.64**	.73**
4.	Other	3.40				---	.21	.31	.40
5.	Personnel tasks	3.61					---	.10	.19
6.	Governing board relations	3.71						---	.09
7.	Planning and administering the budget	3.80							---

** $p < .01$

Just as with task importance ratings, the stress potential that the presidents of public colleges and universities associated with alumni affairs and fund raising was significantly less than that associated with the other six groups of administrative tasks. The three top ranking tasks in terms of stress potential -- planning and administering the budget, governing board relations, and personnel tasks -- were rated significantly higher in stress potential than the three lowest

ranking tasks: program development and improvements, student affairs, and alumni affairs and fund raising ($p < .01$).

Tables 21 and 22 show like comparisons of the stress potential ratings made by the presidents of private institutions.

Table 21 A Comparison of Stress Potential Ratings for Selected Administrative Tasks by Presidents of Private Colleges and Universities (ANOVA)

Source of Variation	df	SS	MS	F
Between Tasks	6	169.2666	28.2111	21.20**
Within Tasks	1628	2166.4860	1.3308	
TOTAL	1634	2335.7526		

**$p < .01$

Table 22 Comparison of Mean Stress Potential Ratings by Presidents of Private Colleges and Universities With Duncan's New Multiple Range Test

			Differences Between Means						
	Administrative Tasks	Mean Ratings	1	2	3	4	5	6	7
1.	Student affairs	2.80	---	.05	.44**	.62**	.68**	.72**	.86**
2.	Program development and improvements	2.85		---	.39**	.57**	.63**	.67**	.81**
3.	Governing board relations	3.24			---	.18	.24	.28**	.42**
4.	Personnel tasks	3.42				---	.06	.10	.24
5.	Other	3.48					---	.04	.18
6.	Alumni affairs and fund raising	3.52						---	.14
7.	Planning and administering the budget	3.66							---

** $p < .01$

Among the stress potential ratings by respondents from private institutions, significantly less stress was associated with student affairs and program development and improvements than each of the other five groups of administrative tasks selected for study. In addition to exceeding student affairs and program development and improvements in stress potential, planning and administering the budget and alumni affairs and fund raising were also identified as having significantly more stress associated with them than governing board relations.

In summarizing stress potential findings, both groups of respondents (those representing public and private institutions) indicated that three groups of tasks -- planning and administering the budget, governing board relations, and personnel tasks -- were significantly more stressful than student affairs and program development and improvements.

The major discrepancy between the two groups of respondents in their perceptions regarding stress again lay in the area of alumni affairs and fund raising. Whereas this area was rated least stressful by public institutional respondents (its mean stress potential rating was significantly less than those for all other tasks), it was identified as the second ranked stress-producing task by representatives of private institutions. Within the latter subgroup, the stress potential associated with alumni affairs and fund raising was significantly greater than the stress associated with governing board relations, program development and improvements, and student affairs.

Task Evaluation Comparisons With Public School Superintendents' Views

It is possible to compare the task evaluations of college and university presidents with those of superintendents in the nation's public schools on the basis of similar data collected from the latter group by the first annual PROBE Survey of District Superintendents which also was conducted during the 1979-1980 academic year.

The only modifications in the tasks submitted for evaluation were that public relations was substituted for alumni affairs and fund raising in the superintendents' survey instrument, and school board relations activities replaced governing board relations. Once data analysis was begun, however, the attempt to treat public relations and alumni affairs and fund raising as equals proved ill-advised due to the fact that the two tasks were not entirely comparable. As it turned out, the bulk of the college and university heads who chose to make use of the "other" option among administrative tasks identified this option as pertaining to public relations and civic affairs. Superintendents were inclined to identify other tasks as office routine and the filing of governmental reports. It would have been more appropriate to have included both public relations and alumni affairs and fund raising among the administrative tasks to be evaluated by post-secondary institutional presidents even though such a move would have given that group an additional task to evaluate. Despite this problem, a high degree of comparability exists between the other administrative tasks evaluated.

Two samples were involved in the PROBE Survey of District Superintendents. The first of these, the random sample, included 2004 randomly selected public school district superintendents; stratification was based on five enrollment categories and the number of school districts in each state which fall within each enrollment category. The second sample was comprised of the superintendents of the 200 most populous school districts in the United States. Responses were received from 1154 superintendents in the random sample (57.6 percent) and from 133 of those in the large district sample (66.5 percent).

The results of school superintendents' administrative task evaluations are show in Table 25.

Table 25 Administrative Task Evaluations by Random Sample and Large District Superintendents

	Random Sample			Large Districts		
	Time	Importance	Stress	Time	Importance	Stress
Administrative Tasks	Rank	Mean Rating*	Mean Rating*	Rank	Mean Rating*	Mean Rating*
Public relations	6	3.81	3.20	4	3.86	3.37
Planning and administering the budget	2	4.00	3.30	3	4.01	3.36
Personnel tasks (recruitment, negotiations, etc.)	1	3.90	3.73	6	3.68	3.54
School board relations/activities	3	3.99	3.62	1	4.19	4.05
Program development and improvements	4	3.86	2.92	2	3.93	2.85
Student affairs	7	3.34	2.71	7	3.11	2.63
Other administrative tasks**	5	3.28	3.86	5	4.07	3.85

* Ratings were based on a five-point scale with five being high.

** Identified most frequently were office routine and government reports, transportation and physical plant concerns, staff development, legal affairs, and administrative supervision.

Correlation matrices (Spearman rho) showing relationships among the ratings of top administrators in public and private colleges and universitites, a cross section of the nation's school districts, and in the nation's 200 most populous districts appear in Table 26.

The correlations obtained support the conclusion that funding sources primarily determine task evaluation responses. As can be seen in Table 26, the relationships observed between the ratings emanating from public colleges and universities and

Table 26 Intercorrelations Among Task Evaluations by Top Administrators in Educational Institutions

Evaluation/Group	1	2	3	4
Time Consumption:				
1. Public college and university presidents	1.000	.214	.714	.607
2. Private college and university presidents	.214	1.000	.071	.643
3. Randomly selected superintendents	.714	.071	1.000	.321
4. Large district superintendents	.607	.643	.321	1.000
Task Importance:				
1. Public college and university presidents	1.000	-.143	.750	.464
2. Private college and university presidents	-.143	1.000	-.179	.714
3. Randomly selected superintendents	.750	-.179	1.000	.464
4. Large district superintendents	.464	.714	.464	1.000
Stress Potential:				
1. Public college and university presidents	1.000	.321	.536	.429
2. Private college and university presidents	.321	1.000	.464	.321
3. Randomly selected superintendents	.536	.464	1.000	.857
4. Large district superintendents	.429	.321	.857	1.000

those representing the two groups of public school superintendents were considerably closer in all three areas than the relationship observed between the ratings of presidents in public and private colleges and universities. This was particularly true in the case of task importance ratings where negative correlations were obtained in comparing the ratings of private institutional representatives with those of the heads of public colleges and universities and randomly selected superintendents in the public schools. Contrasting sharply with this observation (and virtually unexplainable) was the fact that the correlation between large district findings and those for private institutional presidents was higher than those found in comparing the former group's ratings with those of representatives of the other two groups of public institutions.

Overall the highest degree of agreement was found between the various groups' stress potential ratings.

Comparisons of Time Management Ratings

Although no provisions were made for identifying the actual time spent in carrying out the administrative tasks identified, ordinal time consumption rankings were obtained both from college and university presidents and from superintendents in public school districts. The time consumption ranks achieved

by the ratings of the four comparison groups are shown in Table 27.

Table 27 Ordinal Comparisons of the Time Allocated to Selected Administrative Tasks

Administrative Tasks	Time Consumption Ranks			
	College/University Presidents		Public School Superintendents	
	Public Institutions	Private Institutions	Random Sample	Large Districts
Alumni affairs and fund raising (presidents)/public relations (superintendents)*	7	1	6	4
Planning and administering the budget	1	2	2	3
Personnel tasks (recruitment, negotiations, etc.)	4	6	1	6
Governing board relations/school board relations	3	4	3	1
Program development and improvements	2	3	4	2
Student affairs	6	7	7	7
Other administrative tasks*	5	5	5	5

* The tasks combined in these areas are incompatible; the only meaningful comparisons are those made directly between college administrator groups and those made directly between superintendent groups.

As can be seen in Table 27, considerable agreement was found in the time consumption ranks achieved by the various comparison groups, especially in the areas of planning and administering the budget, program development and improvements, and student affairs. The greatest disparity was observed between college and university presidents in the area of alumni affairs and fund raising with a big edge going to the administrators of private institutions. Random sample superintendents appeared to devote considerably more time to personnel tasks than the other three administrator groups. And large district superintendents appeared to devote more time to board relations than any of the other groups.

Of the directly comparable administrative tasks, more agreement was found in the rankings of student affairs than with any other administrative task. None of the four comparison groups rated this area higher than sixth among the seven areas studied.

Comparisons of Task Importance Ratings

Table 28 summarizes comparison of task importance ratings by the four comparison groups: public college and university presidents, presidents of

private institutions, random sample public school district superintendents, and large district superintendents.

Table 28 Statistical Comparisons of Mean Task Importance Ratings*

Administrative Tasks	College/University Presidents		Public School Superintendents	
	1 Public Institutions	2 Private Institutions	3 Random Sample	4 Large Districts
Alumni affairs and fund raising (presidents)/public relations (superintendents)**	(-2)	(+1)	(0)	(0)
Planning and administering the budget	(+2,3)	(-1)	(-1)	(0)
Personnel tasks (recruitment, negotiations, etc.)	(+2)	(-1,3)	(+2)	(0)
Governing board relations/school board relations	(0)	(0)	(0)	(0)
Program development and improvements	(+2,3)	(-1)	(-1)	(0)
Student affairs	(0)	(0)	(0)	(0)
Other administrative tasks**	(0)	(0)	(-4)	(+3)

* Symbols should be interpreted as follows: (+) shows which groups' ratings (by column number) are exceeded statistically by that group's mean rating; (-) indicates which groups' mean ratings (by column number) are statistically superior to that group's mean rating; (0) indicates that no statistically significant differences were observed.

** The tasks combined in these areas are incompatible; the only meaningful comparisons are those made directly between college administrator groups and those made directly between superintendent groups. Other intergroup differences are not shown in the table.

As noted in the table, comparisons between presidents' and superintendents' ratings were not feasible in the areas of alumni affairs/public relations and other administrative tasks due to the fact that they represent incompatible combinations. Therefore, the comparisons presented in these areas were confined to those for related groups.

It can be seen in the table that public college and university administrators attached greater importance to personnel tasks than private institutional presidents. And they rated program development and improvements of higher importance than did either private college and university presidents or random sample superintendents.

The task importance ratings of private college and university presidents exceeded those by other administrative groups in one area, that being alumni

affairs and fund raising which they considered significantly more important than their colleagues in public colleges and universities.

Task importance ratings by superintendents showed statistical superiority in two instances. Random sample superintendents rated personnel tasks of greater importance than private institutional presidents did, and large district superintendents viewed other administrative tasks as being more important than did their random sample counterparts. Among superintendents, other administrative tasks largely were defined as office routine and governmental reports.

Stress Potential Ratings

Like comparisons were made between the four groups' stress potential ratings for the various tasks. The results appear in Table 29 (see page 32).

Table 29 Statistical Comparisons of Stress Potential Ratings*

	College/University Presidents		Public School Superintendnets	
	1	2	3	4
Administrative Tasks	Public Institutions	Private Institutions	Random Sample	Large Districts
Alumni affairs and fund raising/ public relations	(-2)	(+1)	(0)	(0)
Planning and administering the budget	(+3,4)	(+3,4)	(-1,2)	(-1,2)
Personnel tasks (recruitment, negotiations, etc.)	(0)	(-3)	(+2)	(0)
Governing board relations/school board relations	(+2) (-4)	(-1,3,4)	(+2) (-4)	(+1,2,3)
Program development and improvements	(0)	(0)	(0)	(0)
Student affairs	(+3,4)	(0)	(-1)	(-1)
Other administrative tasks**	(0)	(0)	(0)	(0)

* Symbols should be interpreted as follows: (+) shows which groups' ratings (by column number) are exceeded statistically by that group's mean rating; (-) indicates which groups' mean ratings (by column number) are statistically superior to that group's mean rating; (0) indicates that no statistically significant differences were observed.

** The tasks combined in these areas are incompatible; the only meaningful comparisons are those made directly between college administrator groups and those made directly between superintendent groups. Other intergroup differences are not shown in the table.

In summary, presidents of public colleges and universities associated greater stress than either group of superintendents with planning and administering the budget and student affairs. They also perceived governing board relations as being more stressful than private institutional presidents did.

A direct split was found between the opinions of higher education administrators and superintendents on the amount of stress associated with planning and administering the budget. Private college and university presidents, just as their colleagues in public institutions did, rated this area significantly more stressful than was the case with either group of superintendents. Private institutional presidents also associated greater stress with alumni affairs and fund raising than did public college and university presidents.

The stress potential ratings of random sample superintendents exceeded those by private college and university presidents in two areas: personnel tasks and governing board (school board) relations. The only area perceived to be more stressful by large district superintendents was governing board (school board) relations; this group rated it significantly higher than each of the other comparison groups.

Challenging Issues That Confront Institutions of Higher Education

Two items in the PROBE Institutional President Survey focused upon the issues that confront institutions of higher education. The first of these required survey participants to identify, in the order of their importance, the three most challenging issues confronting their institutions at the time the survey was taken (February 1980). The second item required survey respondents to name two other issues that they felt would present serious challenges to their institutions in the next ten years.

Comparisons in this area also have been confined to the presentation of findings based on the reports of respondents representing the two subgroups based on institutional sponsorship (public and private). The current issues identified appear in Table 23 (see page 34).

Current Issues

As can be seen in the table, complete agreement between the subgroups representing public and private institutions was found only on the top two issues--inflation and financial concerns and concerns related to declining enrollment--and on the problem ranked sixth, changing mission and purpose. With those exceptions, considerable variability was ovserved in the relative importance associated with the issues identified by the two groups. Despite the variability apparent, a significant positive relationship was in the form of rank difference correlation elicited ($rho = .567$, $p < .01$).

Table 23 Critical Issues Currently Confronting Colleges and Universities as Identified by Presidents of Those Institutions.

Issues	Public Institutions (n = 202)			Private Institutions (n = 325)			Combined Groups (n = 527)		
	Rank	Response Percent*	Score**	Rank	Response Percent*	Score**	Rank	Response Percent*	Score**
Inflation and financial concerns	1	65.3	317	1	63.7	493	1	64.3	810
Enrollment declines/recruitment and retention	2	49.0	212	2	66.2	482	2	59.6	694
Program development and improvements	3	38.6	136	4	32.9	169	3	35.1	305
Endowment and fund raising	15	6.9	23	3	37.5	257	4	25.8	280
Changing mission and purpose	5	18.8	75	5	17.5	101	5	18.0	176
Program maintenance/reorganization in response to inflation and enrollment	4	18.8	79	6	11.4	83	6	14.2	162
Other miscellaneous issues#	6	13.4	51	9.5	7.7	39	7	9.9	90
Facility development and improvements	12	7.4	29	8	9.8	46	8	8.9	75
Governmental/legal regulations and interference	10	9.9	33	9.5	7.7	39	9	8.5	72
Maintaining unique, independent thrusts (liberal arts, religion, etc.)	19.5	0.0	0	7	9.8	68	10	6.1	68
Faculty recruitment/retention	14	6.9	28	11	7.1	38	11	7.0	66
Faculty and student morale	11	8.9	29	13	6.5	34	12	7.4	63
Faculty development	13	8.9	28	12	7.1	34	13	7.8	62
Public relations	9	9.4	38	15	4.9	24	14	6.6	62
Governing board relations	7	11.9	43	17	3.7	18	15	6.8	61
Faculty militancy and unionism	8	10.4	38	16	3.4	20	16	6.1	58
Faculty salary parity	17	5.0	18	14	4.9	25	17	4.9	43
Staff reduction and tenure considerations	16	5.0	20	20	1.2	7	18	2.7	27
Energy concerns	18	1.5	5	19	2.5	10	19.5	2.1	15
Interinstitutional competition and rivalry	19.5	0.0	0	18	3.4	15	19.5	2.1	15

* Percentage of respondents in each category who identified each issue among the top three confronting their institutions.

** Scores were accumulated on the basis of 3 points for each top-ranking response, 2 points for each second ranking response, and 1 point for each third ranking response.

\# Issues that did not conform to other categories; among the more frequent ones were athletics and Title IX (6), improved management (6), and temporarily increasing enrollment (3).

The proportions of respondents who identified each issue among the top three concerns at their institutions were compared with Fisher's $\bar{z}$ ratio. Significantly greater proportions of the respondents who represented public institutions were found to have identified governing board relations, faculty militancy and unionism, and staff reduction and tenure considerations among their top three choices. On the other side of the ledger, enrollment concerns, endowment and fund raising, maintaining unique, independent thrusts (liberal arts, religion, etc.), and interinstitutional competition and rivalry were identified with significantly greater frequency by respondents from private institutions. (All differences reported were significant at the .01 level.)

Two of these differences deserve further explanation. Even though both groups identified governing board relations as a problem, the thrust of these evaluations appeared to differ as well as the emphases. Whereas responses from public institutions appeared to focus on potential financial benefits, the majority of those from private institutions were concerned with church affiliations or with the identification of active, competent trustees. Secondly, the maintenance of unique independent thrusts was a problem identified only in the private sector. For the most part, this problem focused on two trends: the secularization of educational interests and the increasing client demand for vocational training at the expense of liberal arts programs.

Score totals (based on three points for first responses, two points for second responses, and one point for third responses) show that inflation and financial concerns and enrollment considerations far outrank all the other issues identified in both groups except for endowment and fund raising in the private institution subgroup.

For all practical purposes, half or more of the twenty current problems listed could be construed to be based on financial considerations. Among the top ten problems identified by presidents of public institutions, at least four are strongly related to financial considerations (numbers indicate ranks): (1) inflation and financial concerns; (2) enrollment considerations; (4) program maintenance/reorganization in response to inflation and enrollment declines; and (8) faculty militancy and unionism. In fact, if one were to include more subtle relationships, other miscellaneous issues is the only one of the top ten problems (number six) that would be omitted.

In the top ten problems identified by presidents of private institutions, five were closely related to fiscal concerns. They were: (1) inflation and financial concerns; (2) enrollment considerations; (3) endowment and fund raising; (6) program maintenance/reorganization in response to inflation and

declining enrollments; and (8) facility development and improvements. As with responses from public institutions, if more obscure fiscal relationships were encompassed, nine of the top ten problems would be included.

Following fiscal concerns in importance among the current problems identified were those related to planning and program considerations and faculty improvement and renewal interests. Problems related to the former area were changing mission and purpose, program development and improvements, and program maintenance in response to inflation and enrollment. Representing faculty improvement and renewal interests were faculty recruitment/retention, faculty and student morale, faculty development, faculty salary parity, and staff reduction and tenure considerations.

Future Issues

The findings related to the survey item that requested that respondents identify two other issues that would present serious challenges to their institutions in the next ten years are summarized in Table 24 (see page 37).

As is evident in the table, the same twenty problem categories were used in summarizing findings regarding future issues. Considerable agreement was found in the ratings of current and future issues as evidenced by rank difference correlations (Spearman rho). Between the two groups of ratings for public institutions the correlation was .811; it was somewhat lower for ratings in private institutions (rho = .744). The correlation observed between the ratings for public and private institutions on future issues (rho = .488) was slightly lower than found between their ratings for current issues (rho = .567).

Just as with current issues, fiscally related concerns headed the list of future issues, but changing mission and purpose and governmental/legal regulations and interference moved into the top four ratings for both subgroups. The top five future issues in public institutions were: (1) inflation and financial concerns; (2) changing mission and purpose; (3) enrollment considerations; (4) governmental/legal regulations and interference; and (5) program development and improvements.

The top five ranking future issues in private institutions were: (1) enrollment considerations; (2) inflation and financial concerns; (3) governmental/legal regulations and interference; (4) changing mission and purpose; and (5) endowment and fund raising.

Greater change was evident in ratings for private institutions. Among the most noteworthy advances between the rankings of current and future problems were made in the areas of governmental/legal regulations and interference (from a

Table 24 Issues That College and University Presidents Believe Will Present Serious Challenges to Their Institutions In the Next Ten Years

Issues	Public Institutions (n = 189) Rank	Response Percent*	Score**	Private Institutions (n = 307) Rank	Response Percent*	Score**	Combined Groups (n = 496) Rank	Response Percent*	Score**
Enrollment declines/recruitment and retention	3	21.7	109	1	30.6	252	1	27.2	361
Inflation and financial concerns	1	31.7	151	2	26.4	200	2	28.4	351
Changing mission and purpose	2	27.5	129	4	14.7	116	3	19.6	245
Governmental/legal regulations and interference	4	13.2	62	3	21.8	178	4	18.5	240
Endowment and fund raising	15	4.8	22	5	15.6	109	5	11.5	131
Facility development and improvements	9	7.4	38	6	11.7	92	6	10.1	130
Program development and improvements	5	11.1	52	8	8.5	68	7	9.5	120
Program maintenance, reorganization in response of inflation and enrollment	7	10.6	48	11	6.8	52	8	8.3	100
Faculty militancy and unionism	6	10.6	50	12	6.2	49	9	7.9	99
Other miscellaneous issues#	8	9.5	44	15	5.2	37	10	6.9	81
Maintaining unique, independent thrusts (liberal arts, religion, etc.)	20	0.0	0	7	10.1	80	11	6.3	80
Energy concerns	14	4.8	23	9	7.2	56	12	6.3	79
Faculty development	13	5.3	27	13	6.5	46	13	6.0	73
Interinstitutional competition and rivalry	16	4.2	21	14	5.2	39	14	4.8	60
Faculty recruitment/retention	19	1.1	5	10	6.8	54	15.5	4.6	59
Staff reduction and tenure considerations	12	5.8	31	16	3.9	28	15.5	4.6	59
Faculty and student morale	10	7.9	34	18.5	2.9	22	17	4.8	56
Public relations	11	6.9	34	20	2.9	21	18	4.4	55
Governing board relations and governance	17	3.7	17	18.5	2.9	22	19	3.2	39
Faculty salary parity	18	2.1	9	17	2.9	24	20	2.6	33

* Percentage of respondents in each category who identified each issue among the two that will confront their institutions in the next ten years.

** Scores were accumulated on the basis of 2 points for each top ranking response and 1 point for each second ranking response.

Issues that did not conform to other categories.

tie for ninth to third place), energy concerns (from nineteenth to ninth), faculty militancy and unionism (from sixteenth to twelfth), staff reduction and tenure considerations (from twentieth to sixteenth), and interinstitutional competition and rivalry (from eighteenth to fourteenth). Noteworthy changes in the other direction were program development and improvements (from fourth to eight), program maintenance/reorganization in response to inflation and enrollment (from sixth to eleventh), other miscellaneous issues (from a tie for ninth to fifteenth), faculty and student morale (from thirteenth to a tie for eighteenth), and public relations (from fifteenth to twentieth). (All differences reported were significant at the .01 level.)

Summary and Conclusions

The PROBE Survey of Institutional Presidents was conducted during the 1979-1980 academic year. The survey was designed to accomplish four major objectives: (1) the collection of demographic data; (2) the identification and evaluation of experiences included in the incumbents' professional backgrounds; (3) the evaluation of selected administrative tasks in terms of time consumption, importance and stress potential, and (4) the identification of challenging issues confronting educational institutions -- now and in the future.

Invited to participate in the survey were the ranking officers of 1345 colleges and universities in the United States. Of these, 481 were public institutions and 864 were under private sponsorship.

A one-page, self-mailing questionnaire was employed for data collection. It was circulated in two mailings; the first in late October with a follow-up dispatch in late January.

Survey Response

A total of 544 completed questionnaires were returned, an overall response rage of 40.4 percent. Respondents represented 266 public colleges and universities (response rate = 42.8 percent) and 336 private institutions (response rate = 38.9 percent); two respondents failed to identify their institution's sponsorship status. One hundred thirty universities and 407 colleges were represented (seven failed to identify institutional types).

Respondent Characteristics, Sex, and Title

Responses from 477 males and sixty-six females were included (one response was not identified by sex). Regarding titles, 88.1 percent of the respondents

identified themselves as the presidents of the institutions they represented, and 5.3 percent held the title of chancellor; 6.4 percent indicated that they held other titles, and 0.2 percent failed to identify their positions. Most frequently mentioned under other titles were dean or academic dean, vice-president, acting chancellor or president, and provost.

Academic Preparation

Social science fields, which were identified by nearly one-third of the respondents who supplied such information, dominated the major emphases at the undergraduate, master's, and terminal degree levels. At the baccalaureate level, the top five areas of major study were: (1) social science fields (33.1 percent); (2) English/language arts (13.4 percent); (3) natural sciences (12.6 percent); (4 and 5) general education and philosophy (each with 7.2 percent).

At the master's degree level, the top five were: (1) social science fields (25.4 percent); (2) general education (17.9 percent); (3) English/language arts (9.6 percent); (4) religion/theology (9.5 percent); and psychology (6.5 percent).

And at the terminal degree level, the list of majors was headed by: (1) social science fields (28.2 percent); (2) unspecified administration (14.6 percent); (3) education (14.5 percent); (4) psychology (8.4 percent); and English/language arts (7.8 percent). The terminal degrees earned most frequently were the Ph.D. (81.3 percent) and the Ed.D. (15.7 percent).

Professional Experience Evaluations

Seventeen different types of experiences in four categories -- teaching, public service, professional practice, and administration -- were evaluated as preparational experiences for college and university presidencies. The five most common experiences shared by respondents and the percentage of them who had had these experiences follow: (1) teaching in post-secondary institutions (81.0 percent); (2) deanships in higher education (55.4 percent); (3) vice-presidencies in higher education (45.9 percent); (4) chairmanships of post-secondary academic departments (44.1 percent); and (5) teaching in secondary schools (37.5 percent).

Formal preparation for educational administration was represented by academic training in educational administration that led to a degree and/or certification, and by administrative internships in post-secondary education. These experiences were shared by 32.3 and 13.3 percent of the respondents respectively.

The five experiences perceived by respondents as providing the most valuable preparation for institutional presidencies, in order of perceived importance, were: (1) vice-presidencies in higher education; (2) deanships in higher education; (3) teaching in post-secondary institutions; (4) other administrative experiences; and (5) managerial positions in business and industry. Identified most frequently under other administrative experiences were other institutional presidencies, assistant to president, and chancellor.

The two formal preparational experiences -- administrative internships in higher education and academic training in educational administration -- rated eighth and tenth respectively. They were in a virtual tie with theological experience which ranked ninth.

Statistical examination (with Duncan's new multiple range test) of the overall results, revealed that both administrative internships and academic training in educational administration were exceeded in importance as preparational experiences by the four highest ranking experiences (vice-presidencies, deanships, post-secondary teaching, and other administrative experiences). In turn, these two formal preparational experiences exceeded the four lowest ranking experiences, namely: (14) teaching in secondary schools; (15) health practices (dentistry, medicine, veterinary medicine); (16) elective public office; and (17) teaching in elementary schools.

Like comparisons among other subgroups based on sponsorship (public and private), institutional status (colleges and universities), and sex revealed only minor departures from overall findings, except in the case of the female subgroup where the low sample number ($n = 66$) deterred the elicitation of significant findings. In that subgroup, academic training in educational administration exceeded only elementary teaching in importance; and administrative internships were rated significantly higher than both elementary and secondary teaching ($p < .01$ in all instances). No experiences were rated significantly higher than academic training and internships in this subgroup.

Evaluation of Administrative Tasks

Six groups of administrative tasks plus "other" were evaluated from three difference perspectives: from the standpoint of time consumption; in terms of functional priority (importance to overall job performance); and according to stress potential (the degree to which they tax physical and emotional reserves). Due to rather distinct differences in the responses from representatives of public institutions and those from private colleges and universities, meaningful comparisons were confined to those subgroups for the most part.

However, limited investigations based on sex and institutional status variables (colleges and universities) were made. They revealed that university presidents placed greater priority on program development and improvement and associated more stress with governing board relations than their college counterparts. These differences may well have been linked to sponsorship status, however. The only significant sex-linked variable was found in the fact that female presidents associated less stress with student affairs than males.

Time Management

Among responses from public colleges and universities the tasks examined were ranked in the following order according to time consumption: (1) planning and administering the budget; (2) program development and improvements; (3) governing board relations (regents, trustees, legislative groups, etc.); (4) personnel tasks (recruitment, negotiations, etc.); (5) other administrative tasks*; (6) student affairs; and (7) alumni affairs and fund raising.

Representatives of private institutions ranked them as follows: (1) alumni affairs and fund raising; (2) planning and administering the budget; (3) program development and improvements; (4) governing board relations; (5) other administrative tasks*; (6) personnel tasks; and (7) student affairs. The rank difference correlation was only .214 between the time consumption ranks of the two subgroups.

Task Importance

The ranks achieved by the task importance ratings of the public institution subgroup were identical to those for time consumption. The responses from private institutions placed them in the following order on the basis of their perceived importance: (1) other administrative tasks; (2) alumni affairs and fund raising; (3) governing board relations; (4) planning and administering the budget; (5) program development and improvements; (6) personnel tasks; and (7) student affairs.

Orthogonal t ratio comparisons revealed that presidents of private institutions placed significantly more importance on alumni affairs and fund raising than those from public colleges and universities. Conversely, public institutional representatives rated planning and administering the budget, personnel tasks, and program development and improvements significantly higher than their counterparts in private institutions.

*Identified most frequently in this area were public relations and civic affairs, general/routine administration, administrator and faculty relations, and long-range planning.

Intragroup comparisons with Duncan's new multiple range test revealed that the presidents of both public and private institutions perceived governing board relations, planning and administering the budget, and program development and improvements to be significantly more important to their overall functioning than their handling of student affairs. They also rated planning and administering the budget as being significantly more important than personnel tasks.

The major disagreement between these groups was found in the importance attached to alumni affairs and fund raising. It was rated significantly less important than all other tasks by the public institution subgroup, and it was ranked second in importance by the private college and university subgroup where it rated significantly higher than program development and improvements, personnel tasks, and student affairs.

Stress Potential

The stress potential ratings of public institutional presidents ranked the tasks in the following order: (1) planning and administering the budget; (2) governing board relations; (3) personnel tasks; (4) other administrative tasks; (5) program development and improvements; (6) student affairs; and (7) alumni affairs and fund raising.

The ranks achieved in the stress potential ratings of private institutional respondents were: (1) planning and administering the budget; (2) alumni affairs and fund raising; (3) other administrative tasks; (4) personnel tasks; (5) governing board relations; (6) program development and improvements; and (7) student affairs.

Orthogonal t ratio comparisons revealed only two significant differences in the stress potential ratings of the two groups: private institutional presidents indicated that alumni affairs and fund raising more stressful, and public institutional presidents associated significantly greater stress with governing board relations ($p < .01$).

In summary of intragroup stress potential ratings, both the public and private subgroups indicated that three groups of tasks -- planning and administering the budget, governing board relations, and personnel tasks -- were significantly more stressful than student affairs and program development and improvements.

The major discrepancy between the two groups of respondents regarding stress again lay in the area of alumni affairs and fund raising. The mean stress

potential rating for this area in the public institution subgroup was significantly lower than those for all other tasks. Among private institutional respondents, alumni affairs and fund raising ranked second in stress potential, and it was viewed as being significantly more stressful than governing board relations, program development and improvements, and student affairs.

Generally, the more closely a task is associated with fiscal matters and funding sources, the greater the time,importance and stress associated with it.

Challenging Issues That Confront Institutions of Higher Education

The challenging issues confronting the nation's colleges and universities were investigated from two different angles. First, respondents were asked to identify, in order of importance, the three most challenging issues confronting their institutions at the time the survey was taken. Secondly, they were asked to identify two additional issues that would seriously challenge their institutions in the next ten years.

Twenty problem categories were identified, and nearly half of these were directly related to financial concerns. Although they overlapped to some degree, almost all the issues could be assigned within three categories: (1) fiscal and funding concerns; (2) planning and program considerations; and (3) concerns related to faculty development and renewal.

Just as with task evaluations, problem ratings were tied closely to sponsorship status -- the sources of operating funds. As a result, analysis in this area also were confined to examining similarities and differences in the reports of public and private institutional representatives.

Current Issues

Agreement between subgroups was found only on the top two issues -- inflation and financial concerns and enrollment declines/recruitment and retention -- and the fifth place issue which was changing mission and purpose.

The ten most challenging current issues identified by the presidents of public colleges and universities were: (1) inflation and financial concerns; (2) enrollment concerns; (3) program development and improvements; (4) program maintenance/reorganization in response to inflation and enrollment; (5) changing mission and purpose; (6) other miscellaneous issues; (7) governing board relations;

(8) faculty militancy and unionism; (9) public relations; and (10) governmental/legal regulations and interference.

Among the ratings by representatives of private institutions, the top ten problems identified were: (1) inflation and financial concerns; (2) enrollment considerations; (3) endowment and fund raising; (4) program development and improvements; (5) changing mission and purpose; (6) program maintenance/reorganization in response to inflation and enrollment; (7) maintaining unique, independent thrusts (liberal arts, religion, etc.); (8) facility development and improvements; (tied for ninth) governmental/legal regulations and interference, and other miscellaneous issues.

Comparisons between groups revealed that significantly greater proportions of public institutional representatives identified governing board relations, faculty militancy and unionism, and staff reduction and tenure considerations among the three most challenging issues confronting their institutions. Significantly greater proportions of private institutional representatives identified enrollment concerns, endowment and fund raising, and maintaining unique, independent thrusts (liberal arts, religion, etc.). (All differences were significant at the .01 level.)

The latter concern was a problem unique to private institutions. By and large, it was a two-faceted problem embodied by growing educational secularism and the presence of greater emphases on vocational training to the detriment of liberal arts.

Future Issues

In moving from current to future issues, noteworthy shifts were identified in the elevated importance of governmental/legal regulations and interference, changing mission and purpose, faculty militancy and unionism, and energy concerns.

Ranked highest among the top ten future issues identified by presidents of public colleges and universities were: (1) inflation and financial concerns; (2) changing mission and purpose; (3) enrollment concerns; (4) governmental/legal regulations and interference; (5) program development and improvements; (6) faculty militancy and unionism; (7) program maintenance/reorganization in response to inflation and enrollment; (8) other miscellaneous issues; (9) facility development and improvements; and (10) faculty and student morale.

In the subgroup representing private institutions, the top ten future issues identified were: (1) enrollment concerns; (2) inflation and financial concerns;

(3) governmental/legal regulations and interference; (4) changing mission and purpose; (5) endowment and fund raising; (6) facility development and improvements; (7) maintaining unique, independent thrusts; (8) program development and improvements; (9) energy concerns; and (10) faculty recruitment/retention.

Intergroup comparisons revealed that greater proportions of public college and university presidents identified changing mission and purpose among their top two future concerns. Significantly greater proportions of private college and university presidents identified enrollment concerns, endowment and fund raising, and maintaining unique, independent thrusts among their top two choices.

Discussion

One of the first things one notices in examining the findings of the PROBE Institutional President Survey is the dearth of females who occupy college and university presidencies, especially in public institutions. Only sixty-six of the 544 respondents were women (12.1 percent) and sixty-one of these were from private institutions. Obviously, much progress remains to be made if women are to achieve a reasonable share of the top leadership positions in higher education.

Education and Job Preparation

Another interesting statistic was the fact that less than half of the nation's college and university presidents who responded to the survey had been exposed to formal administrative training. At the terminal degree level, only about thirty percent of the respondents reported having earned degrees in areas allied with some form of administration (business administration, higher education, unspecific administration). And none of the respondents reported having earned terminal degrees in educational administration *per se*.

From the standpoint of professional experiences, however, 32.2 percent of the respondents indicated that they had participated in academic training in education administration that led to a degree and/or certification. An additional 13.3 percent indicated that they had participated in administrative internships in post-secondary education, but no provisions were made to identify how many of these experiences overlapped with or were components of academic administrative training programs.

But one of many ironies in the field of education is the absence of certification requirements for college and university presidencies. A glance at the "Bulletin Board" in the Chronicle of Higher Education reveals that the most common requirements for such positions according to the advertisements are an earned terminal degree, evidence of scholarly excellence in one's field, and administrative experience in higher education.

Pointing up the irony of the situation are the stringent certification requirements imposed by all states for the attainment of elementary school principalships while no such requirements exist for leadership positions in the country's largest, most complex educational institutions -- its colleges and universities. How does one reconcile the fact that more pertinent academic training is required for the principalship of "Primrose Grammar School" than for the presidency of "State U."? It appears that the regulatory agencies that govern education may have overlooked something!

Or have they? Direct, antecedent professional experiences -- vice-presidencies, deanships, managerial positions in business or industry, and chairing post-secondary academic departments -- could be expected to supercede academic administrative training and administrative internships as preparational experiences. But how does one account for the fact that post-secondary teaching experience, other teaching experiences (military, adult education, and graduate teaching), and theological experiences were identified by survey respondents as being equal or superior to formal administrative training as preparational experiences for presidencies in higher education? (Considering the gravity of the problems facing institutions of higher education, especially inflation, declining enrollments, and public apathy, perhaps it is not too surprising that theological training and experience are considered viable preparational experiences. When all else fails, prayer may be the only alternative!)

In any event, one thing appears certain: that the nation's universities must give much needed attention to upgrading programs designed for the preparation of leaders in higher education, both at the pre-service and in-service levels. Based on other findings of the PROBE Institutional President Survey relative to administrative task evaluations and respondents' perceptions of the current and future issues confronting higher education, it would appear that such efforts could well be focused on the following concerns: fiscal responsibility; the exploitation of traditional and nontraditional funding sources; alternatives for meeting or staving off the effects of enrollment declines; alternatives for the

development of new missions, roles and programs (especially those that apply to nontraditional students); the maintenance of institutional and program integrity in the face of financial and governmental pressures; personnel considerations; the promotion of positive public relations and confidence; and, where inevitable, the effective management of decline.

Determined improvement efforts in the aforementioned areas by institutions which engage in the training of aspiring leaders in the field of higher education could serve to promote more effective and efficient leadership in the nation's colleges and universities. Side benefits could also be the elevation of prestige associated with such programs and subsequently, an improved source of graduate admissions.

From a facetious standpoint, in response to the findings of this study, the alternative may be the introduction of higher education management techniques into traditional preparational programs in the social sciences. Somehow, it seems rather strange that the formal training of nearly a third (or more) of the college and university presidents who reported was limited largely to social science education (most often history, political science, and economics).

While most learned persons would concede that knowledge of the past promotes understanding of the future, at least as many probably would agree that some form of managerial training would be a desirable prerequisite for assuming the leadership of society's largest and most complex educational enterprises.

Have we not achieved the status of business and industry where "rising through the ranks" has largely been supplanted by professional training for leadership positions? Seemingly, advanced preparation and heightened sensitivities that should result could serve to promote greater efficiency as one enters into the profession; the vicarious, simulated, and direct experiences associated with academic administrative training and internships should help one avoid at least some of the pitfalls associated with trial and error approaches.

Before moving on, administrative internships are deserving of additional commentary. Although females rated internships somewhat higher (males rated interships even lower than academic administrative training), such internships still did not show the kind of superiority one would expect practical experience opportunities to hold over academic preparation. This represents a rather significant departure from the situation that often prevails at the undergraduate level where practice teaching and other practicum experiences often are considered among the more valuable aspects of preparational programs.

It appears that administrative internships in higher education also are in need of some refinements. Some additional suggestions may be in order for both academic and internship training programs according to response differentials observed in the course of the research which were associated with the sponsorship status of the institutions represented, especially in the areas of task evaluation and the identification of critical issues.

Regarding sponsorship status, it would appear appropriate that aspirants for leadership positions in private colleges and universities be afforded opportunities to gain more experience in the area of development (alumni affairs, fund raising, and endowment). Seemingly, their counterparts aspiring to positions with public colleges and universities would profit more from greater exposure in the realm of governing board relations. Both groups would profit from involvement in activities pertaining to relations with faculty, with governmental agencies, and with the public.

The only significant response difference between the sexes was found in the fact that male college presidents associated greater stress with student affairs than their female colleagues. Attention perhaps should be given to the recognition and accommodation of this difference within leadership training programs.

Administrative Task Evaluations

In approaching time management, job priorities, and the stress associated with selected administrative tasks in conjunction with this research, it soon became obvious that sponsorship status was the only truly viable basis for drawing comparisons. Other potential comparison groups based on enrollment and institutional status (colleges vs. universities) simply reflected, or were contaminated by, the different characteristics of the responses by presidents of public and private institutions. This phenomenon also carried over into analysis of the critical issues confronting institutions of higher education.

As a result, any effort directed toward combining the responses of representatives of public and private institutions would have produced virtually meaningless, misleading data compromises. Therefore, comparisons in the areas of task evaluation and the critical issues identified were confined to examinations of similarities and differences in the reports of these two major groups.

Among task evaluations in terms of time management, job priorities (importance), and stress potential, sources of funding accounted for the major differences between the responses of representatives of public and private institutions.

The presidents of public institutions, which are largely dependent upon legislative appropriations funneled through governing boards as a source of funds, rated governing board relations third in importance among the tasks evaluated, and second in terms of stress potential. Private institutional representatives also rated governing board relations third in importance but fifth out of seven in stress. In turn, private institutional representatives rated alumni affairs and fund raising (their major source of support) second in both importance and stress. Their counterparts in public institutions rated this task seventh (and last) in both importance and stress.

Student affairs proved to be another matter. Public college and university presidents rated this task sixth in all three areas--time consumption, importance, and stress. Private institutional representatives rated student affairs seventh in all three instances.

The low position occupied by student affairs in the functional priorities of college and university presidents probably should not be interpreted as evidence of a lack of empathy and concern for students in light of the staffing patterns generally characteristic of such institutions. Usually, a dean of students or vice-president for student affairs is charged with responsibility for student oriented functions.

However, as enrollment declines continue and the competition for students mounts, it may be desirable for presidents to take more active parts in student affairs. Greater involvement with students and the improved visibility that results may afford those institutions where administrators do this effectively an edge in the competition for students and promote improved retention rates.

Critical Issues

If the findings of the PROBE surveys, both of institutional presidents and district superintendents, are any indication -- and one cannot ignore the fact they are -- both public and private educational institutions at all levels face a severe financial crisis. This crisis is compounded by decreasing enrollment projections which preface the further erosion of financial support bases.

The top two problems identified by both major groups of educational leaders (college and university presidents and public school district superintendents) were: (1) inflation and financial concerns; and (2) declining enrollment. Adding impetus to the seriousness of these financial concerns was the fact that at least half of the top twenty problems identified by college and university presidents either were of financial origin or had financial implications.

Growing problems, ranked third and fourth among the future concerns of college and university presidents, were keeping pace with institutions' changing missions and purposes and the threat of governmental/legal regulations and interference. The latter problem was similarly prominent among the concerns of district superintendents. Governmental restrictions and handicapped education requirements, but one form of governmental restriction, ranked third and fourth among the problems identified by that group of educators.

Another prominent concern that was limited exclusively to the reports of private college and university presidents (it ranked seventh among current and future challenging issues) was the preservation of their institutions' unique, independent thrusts. By and large, this referred to their ability to resist the secularlization of religion-based education, to withstand the encroachment of vocational educational demands into the area of liberal arts, and to maintain their independent approaches to education.

Although this problem was not cited by the administrators of public institutions, variations on its theme may well determine the course of education at all levels in the United States in the future. Much depends upon how administrators and the very fabric of the institutions themselves react to competing alternatives in response to financial pressures and enrollment declines.

At the heart of the matter are the two major principles upon which quality education -- especially quality higher education -- is founded: academic freedom and program integrity. Will they persevere in the face of existing pressures, the likes of which heretofore were unknown? Let us examine the threats posed in greater detail.

First, let us look at the problem of maintaining program integrity. It is threatened both by financial pressures and enrollment declines largely because students mean money in the form of tuition income, in the form of legislative appropriations, or both. There are two ways to effect improved enrollment figures -- to recruit more students and to improve retention rates. More students may be attracted in a variety of ways, a number of which are less than desirable: one such way is the relaxation of enrollment standards; another the easing of program requirements and grading standards; and yet another may be the addition of new, less demanding courses of study. The latter two also may serve to enhance the student retention rate. However, barring sound educational reasons for making such changes, program integrity is bound to be influenced negatively.

Posing another threat to program integrity may well be the heated competition for nontraditional students generated by efforts to fill enrollment quotas. This competition may involve any or all of the aforementioned enrollment boosting practices, none of which can be expected to prove particularly desirable in the long run.

If permitted to grow unchecked, the fierce competition for students may eventually dissolve traditional distinctions between junior colleges, trade schools, colleges, and universities. In the past, it seemed that many two-year institutions sought fulfillment through the institution of pre-liberal arts and pre-professional programs. There is little doubt that many colleges and universities today are considering (if they have not already done so) entry into the competition for students with two-year institutions by offering a variety of vocational programs and other programs of limited scope -- even those of an "artsy-craftsy" nature. Another threat to program integrity that is becoming more prevalent is the willingness of some institutions to indiscriminately certify credit for programs or workshops conducted by outside agencies in exchange for sharing in tuition profits. Often such arrangements involve considerably less instructional time than is required by accrediting agencies. That is why they often prove attractive to teachers and others who are subject to periodic credit requirements for recertification.

Unless carefully considered and evaluated, attempts to economize operations may also have negative influences on program integrity. Among the first program aspects to go in the interest of economy may well be expensive laboratory components and high cost programs with limited enrollments. Deferred maintenance programs, reduced equipment and material acquisitions, uncompetitive faculty salaries, and staff reduction efforts also may hinder program quality. Especially detrimental may be the elimination of younger, untenured, competent faculty upon whose energy and enthusiasm rests the future of the institution and its programs.

Posing a very real threat to both program integrity and academic freedom are the not-so-subtle influences exerted by the federal government through the grants available from and the programs funded by its various agencies. While such agencies seldom dictate what is to be taught from a legislative standpoint, they do dictate what kinds of programs will be funded. Typically, the longer "soft money" programs endure, the more restrictive the guidelines become and the less latitude there is to exercise local decision making, academic freedom, and program quality determination. It is very easy for institutions to fall into

the trap of proposing, designing, and conducting programs in which they have very little genuine interest (and perhaps even less expertise) simply to attract grant funds and, perhaps even more important, the substantive indirect costs that accrue to sponsoring institutions. Institutions are especially vulnerable to such influences in times of financial stress and enrollment declines.

Federally legislated requirements and directives, such as Title IX, also exact a toll on institutional solvency. Often, such requirements involve financial demands far beyond what was anticipated. And all too frequently, institutions are left to their own devices to answer these demands when federal funds are not provided for the implementation of legislated requirements.

Perhaps even greater threats to program integrity and academic freedom are presented by more immediate sources of funds -- regents, trustees, directors, legislative groups, and major benefactors. One cannot begin to estimate the compromises that must be made in order to meet economization directives and to ensure the continuing availability of funds from such sources.

Thus, we have taken a brief look at some of the problems confronting institutions of higher education and their administrators; we also have examined, in a cursory manner, some of the competing influences that attend these problems. Questions remain regarding how individual institutions and their administrators will approach these and other problems, and how they will respond to the influences that accompany them.

1. Will they be able to avoid compromising program integrity in the interest of economy and student recruitment and retention? If so, how and to what degree?
2. Will they be able to preserve academic freedom in the face of competing enrollment and financial pressures? If so, how and to what degree?
3. Will they be able to resist undesirable influences and control by governmental agencies and more immediate sources of financial support as they strive for fiscal security? If so, how and to what degree?

It is readily apparent that the top administrators in the nation's public and private colleges and universities have the unenviable task of leading their institutions through a period of crisis on courses fraught with many competing alternatives, none of which lack potentially negative influences. It is inevitable that some will fail -- hopefully, not many. Under the circumstances, the prospect of the college or university presidency almost brings to mind the old adage often used in reference to jobs of such complexity: "Anyone who is smart enough to handle the job probably is not stupid enough to take it!" (source unknown)

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